Report to the Governor
and General Assembly

IOWA CHILD DEATH REVIEW TEAM

■

DECEMBER 1998

Administrative support provided by
Iowa Department of Public Health

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TABLE OF CONTENTS

CHILD DEATH REVIEW TEAM

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FOREWORD

Lon Walker, Chairperson

More than 300 children, ages six and under, died in Iowa in 1997, and many of these deaths could have been prevented. A number of these children were born with congenital defects that didn't allow them to prosper. Many died as a result of accidents at home, on the farm, or in motor vehicles, and several died as a result of child abuse or from intentional harm. **Iowa's children are our most valuable resource**, and it is incumbent upon us to do all that we can do to allow these children the opportunity to live, learn, and thrive.

Drug use by pregnant women and a lack of adequate prenatal nutrition and health care continue to cause premature births and birth defects. It will take more than just education to solve this problem. It will require a change in lifestyles. Sudden Infant Death Syndrome (SIDS) deaths are showing a downward trend as we learn more about this phenomenon. Research has shown smoking in the home as a significant risk factor and perhaps, a causal factor for SIDS. Placing infants on their backs to sleep has been shown to reduce the number of infant deaths from SIDS, but the challenge is to disseminate this type of information to all parents and caregivers.

There is no excuse for child abuse or neglect, yet we read about cases nearly every month that are child abuse or neglect related. Some deaths remain unexplained due to poor death scene investigations, no autopsy or a lack of cooperation among agencies. The Child Death Review Team has identified many of these issues with corrective suggestions as a part of this year's annual report. It is our team's intent to very carefully and systematically review all deaths within our purview and to provide the information necessary to educate the public, appropriate agencies, and the legislature so that required changes can be initiated to protect our kids.

Executive Summary — 1998 Child Death Review

In 1995, the Iowa General Assembly authorized the creation and responsibilities of the Iowa Child Death Review Team. According to the *Code of Iowa 135.43*, the Child Death Review Team (CDRT) is charged with five responsibilities:

- Collect, review and analyze child death certificates and data, including records, concerning the deaths of children ages six and younger, and prepare an annual report concerning the causes and manner of child deaths.
- Recommend to the governor and the general assembly interventions to prevent deaths of children.
- Recommend to the agencies represented on the CDRT changes that may prevent child deaths.
- Maintain the confidentiality of any patient records or other confidential information reviewed.
- Develop protocols and establish a committee to review child abuse investigations that involve the death of a child.

The membership of the Child Death Review Team (CDRT), method of appointment, length of term, and need for gender and political balance were defined in legislation. The Department of Public Health was given responsibility for providing staff and administrative support.

The CDRT determined that its method of operation would be to review records of all Iowa residents, newborn through six years of age, who died during the previous calendar year, regardless of where the child died. Records would also be reviewed for those out of state residents in the same age range who died in Iowa. The CDRT established subcommittees to assist in the review process. These subcommittees give reports to the CDRT at regular intervals. The full CDRT reviews records of all child deaths resulting from intentional and unintentional injury, Sudden Infant Death Syndrome, and other selected deaths as recommended by subcommittees.

The following working definition of a "preventable death" was adopted and is used by the CDRT in its reviews:

A preventable death is one in which an individual or a community could have reasonably done something that would have changed the circumstances that led to the death.

For the 1997 calendar year, 307 deaths of children from birth through six years of age were identified and reviewed. The CDRT completely reviewed available records for 89 (29%) of these 307 deaths. The remaining 218 deaths were each reviewed by a subcommittee of the CDRT. The CDRT met nine times in 1998. Meeting attendance and participation were commendable, exemplifying each individual team member's commitment to the CDRT's mission. At each meeting, the members divided into work groups, each reviewing from three to six records of child deaths and later discussing with the entire group the circumstances surrounding the deaths and steps that might have prevented the deaths, if any.

Recommendations for prevention of future deaths address a broad range of issues. To aid the CDRT in their reviews, a primary recommendation this year is to mandate use of the Infant Death Scene Investigation Protocol/Form by each county medical examiner for all infant deaths where the cause of death is suspected to be Sudden Infant Death Syndrome or is undetermined at the death scene. Many of the recommendations to the Governor and the Iowa General Assembly made in previous years are again included in this year's report and continue to be strongly recommended as measures that, if implemented, could save Iowa's children from early deaths. Additional recommendations are made to state agencies and their local agents.

Most of these recommendations revolve around two issues: improved education to professional groups and the public, and, expedited collection of information related to child deaths. Concerns regarding incomplete or inaccurate child death information and inaccurate recording of death certificate data are addressed once again.

Also once again, a major recommendation is the establishment of local (county or regional) child death review teams, which would review deaths in a concurrent time frame so that all pertinent information related to the deaths could be obtained while still fresh and available. This system would assist the state CDRT by ensuring the collection of timely information, and help the local communities to recognize and take steps to correct any local systems problems and to provide prevention education to their citizens. In addition, communication and sharing of records would expedite the review process at all levels and help ensure complete and thorough review of each death by two competent panels of reviewers, one at the local level and one at the state level. Expansion of responsibilities of local teams that currently review only infant deaths to cover all child deaths for children through age six is strongly recommended as well.

1998 Iowa Child Death Review Team Report to the Governor and the Iowa General Assembly

In 1995, the Iowa legislature authorized creation of the Iowa Child Death Review Team. The responsibilities of the Child Death Review Team (CDRT) are codified in the *Code of Iowa 135.43* and rules governing its operation may be found in *Iowa Administrative Code 641-90(135).*

The *Code of Iowa* lists five major duties of the CDRT:

- Collect, review, and analyze child death certificates, data, and records, concerning the deaths of children ages six and younger, and prepare an annual report concerning the causes and manners of child deaths.
- Recommend to the governor and the general assembly interventions to prevent deaths of children.
- Recommend to the agencies represented on the CDRT changes that may prevent child deaths.
- Maintain the confidentiality of any patient records or other confidential information reviewed.
- Develop protocols and establish a committee to review child abuse investigations that involve the death of a child.

The membership of the Child Death Review Team (CDRT), method of appointment, length of term, and need for gender and political balance were defined in the legislation. The Department of Public Heath was given responsibility for providing staff and administrative support. Activities completed in establishing the CDRT were described in the 1995 Report to the General Assembly, released in January 1996.

Organizations composed of the fourteen designated groups to be represented on the CDRT were contacted soon after the legislation was signed. Each organization was asked to submit the names of two or three individuals for representation on the CDRT. Names were reviewed and appointments were made by the director of public health in consultation with the director of human services. CDRT membership is balanced in gender and political affiliation. The appointed members and the professions they represent are listed in Appendix A of this report. In July 1998, Lon Walker followed Randell Alexander, M.D. as chair of the CDRT and Mary Ann Kerr, M.S.N. assumed the responsibilities of the vice-chair.

Seven liaisons from state government agencies represent their respective departments/offices on the team. The liaisons fully participate in CDRT meetings and are further responsible for maintaining communication and information-sharing between the CDRT and the state agencies they represent. This communication channel has proven valuable in expediting the gathering of information from the agencies. Examples of this information include driving records (Department of Transportation); accident investigation and reconstruction reports (Department of Public Safety); death certificates (Department of Public Health); and, founded child abuse reports (Department of Human Services). The liaisons also explain department protocols and limitations as they apply to individual death circumstances.

An early task was the development of administrative rules, adopted and published in *Iowa Administrative Code 641-90(135).* These rules became effective in May 1996 and are included as Appendix B of this report.

The CDRT determined that its method of operation would be to review records of all Iowa residents birth through six years of age, who died either in or out of state during the previous calendar year. It would also review records of out of state residents in the same age range, who died in Iowa during that year. Using review tools developed by similar teams in other states as models, the CDRT developed a checklist for members to use in reviewing records. The checklist has been revised several times by the team and now encompasses the items deemed necessary by the CDRT to track each death that is reviewed. The present form is included as Appendix C of this report.

Since the total number of deaths is larger than could be discussed during regular meetings, subcommittees continue to assist in the review.

- Herman Hein, M.D., reviews records of neonatal and infant deaths as a function of the Iowa Perinatal Program. Dr. Hein assumed this responsibility as a subcommittee of one. Dr. Hein works closely with the team coordinator to review all pertinent information regarding these children and periodically reports to the CDRT on these cases.
- The Major Case Review Committee, a multidisciplinary group of local and state agency, and health professionals, has operated for several years through the Department of Human Services. This group reviews records of child deaths resulting from child abuse or neglect and then makes recommendations for improving the abuse/neglect

investigative process. This committee was asked to serve as a subcommittee of the CDRT. Through a shared protocol, the Major Case Review Committee (MCRC) reviews these cases and provides summaries and recommendations to the CDRT. The CDRT Coordinator serves on this review team to facilitate coordination and flow of information and data collection between this subcommittee and the team.

The full CDRT reviews records of all child deaths resulting from unintentional injury, all deaths from Sudden Infant Death Syndrome, and other selected deaths as recommended by the subcommittees.

The following working definition of a "preventable death," originally developed by the Arizona Child Death Review Committee, was adopted by the Iowa CDRT:

A preventable death is one in which an individual or a community could have reasonably done something that would have changed the circumstances that led to the death.

This definition is reviewed at the conclusion of every CDRT meeting to ensure its continuing appropriateness. To date, no revision of this definition has been deemed necessary by the CDRT.

As a result of the CDRT experience during 1996, a recommendation was made in the January 1997 Report to the Governor and General Assembly that two amendments be added to the Code of Iowa 135.43 which governs the CDRT. The first amendment waives the liability of institutions providing information and records to the CDRT, thus expediting information retrieval by staff for the review process. The second suggested amendment addresses the liability incurred by CDRT members in the execution of their CDRT duties, specifically for statements and opinions rendered during the case review process.

The 1997 Iowa Legislature adopted both amendments, which are codified in the Code of Iowa 135.43. These amendments were adopted into Iowa Administrative Code 641-90(135) in 1998. The amendments are included in Appendix B.

For 1997 deaths, the CDRT identified 307 child deaths that fit the review criteria. Of these deaths, 295 were Iowa residents and 12 were out of state residents who died in Iowa. The CDRT completely reviewed available records for 89 (29%) of these 307 deaths. Physician members of the CDRT or one of the team's subcommittees reviewed the remaining 218 deaths.

The CDRT met nine times in 1998 with an average attendance of 74%. At each meeting, the members divided into work groups, each of which reviewed from three to six records of child deaths and later discussed with the entire team the circumstances of the deaths and actions that might have prevented the deaths. Recommendations made by the CDRT are summarized and discussed in each year's report to the Governor and General Assembly.

Recommendations for Prevention of Future Deaths

Based on case reviews of 1995, 1996, and 1997 child deaths, the Child Death Review Team has developed recommendations which, if adopted, could lead to a reduction in deaths of children in future years. These recommendations are not case-specific, but are intended to deal with a broad range of situations. The recommendations are made in two parts: to the Governor and the Iowa General Assembly, and to various state agencies. In every instance, we have established a rationale for the recommendation through an introductory background statement. Some of these recommendations were made in the past two annual reports, but were not acted upon. Reviews of the 1997 deaths showed that these recommendations continue to be viable suggestions for saving the lives of Iowa's children, and so they are again included in our annual report and are noted as having been made in previous years.

Recommendations to the Governor and the Iowa General Assembly

Background Statement 1. Members of the CDRT review all pertinent information available for each child death in order to confirm the manner and cause of death, and to form recommendations as to how the death may have been prevented. In 1996, an Infant Death Scene Investigation Protocol and Report Form were adopted statewide after a six month pilot in ten of Iowa's counties. Extensive education about the protocol and a supply of the forms were distributed to all county medical examiners. Use of the report form is strongly encouraged, but its use is not mandated throughout the state.

In order to correctly determine the cause of death for children less than one year of age at death, especially for infants dying from Sudden Infant Death Syndrome (SIDS), a complete death scene investigation is vital. The nationally adopted definition of SIDS substantiates this need: *Sudden Infant Death Syndrome is the sudden and unexpected death of an apparently healthy infant that remains unexplained after a thorough post mortem, death scene investigation and case history.* By definition, the lack of a death scene investigation report hampers assignment of SIDS as a cause of death by the CDRT during its review process. In addition, vital information that is gathered at the scene and included on the Infant Death Scene Investigation Report Form, helps to assess how that death might have been prevented, if at all.

In 1997, Centers for Disease Control (CDC) adopted and published their own Death Scene Investigation Protocol and Report Form for infant deaths. Iowa's form served as one of the models for the CDC's version. CDC advocates mandatory use of a death scene investigation protocol and report form for all infant deaths. To date, 21 states have mandated use of this type of infant investigation protocol and report form.

Recommendation 1. The Child Death Review Team recommends mandatory use of Iowa's Infant Death Scene Investigation Protocol and Report Form by all county medical examiners in cases of infant death where the cause of death is suspected as SIDS or is undetermined at the time that the death occurs. The county medical examiner should be required to file this standardized Infant Death Scene Investigation form along with the M.E.I report in the State Medical Examiner's Office within four weeks following the child's death.

Background Statement 2. Although the 307 children who died in 1997 died from multiple and diverse causes, many of the deaths could have been prevented. The preventable group would theoretically include all unintentional accidents, all homicides, and a significant number of incidents of SIDS and prematurity. The CDRT has been discomfited by the appalling lack of knowledge and common sense exhibited by the parent(s) of many of the children. Although there have always been parents who brought about child deaths through acts of ignorance and negligence, we currently seem to be experiencing a quasi-epidemic of disregard for the health, safety, and quality of life of children of all ages. Unlike past generations when family and neighbors could usually be relied upon for advice, assistance and respite, the mobile environment in which we now live and the burgeoning frequency of single parent families have given us a new culture of unprepared and unmentored parents. Even when extended family may be present to assist parents, the knowledge base of those individuals may be limited as well. Due to various combinations of ignorance, isolation, and geographic or emotional alienation from traditional sources of help, many parents simply don't know what to expect from a child, what to do for or with a child, or where to go for help and accurate, up-to-date information.

Iowa agencies currently offer family-based services to a limited number of families. These services range from volunteer friendly visitors (information and referral) to the intensive Family Preservation Program. Healthy Opportunities for Parents to Experience Success (HOPES), a home visitor program currently available in ten Iowa counties, follows a model of family needs assessment at the time a child is born. Those families at highest risk of dysfunction receive long-term (up to three years) services to assist parents in developing optimal parenting skills, health knowledge, and ability to appropriately identify and access needed community services.

Recommendation 2. (This recommendation relates to recommendations made in the January, 1997 and 1998 reports that advocated expansion of the HOPES program statewide.) The CDRT recommends that the expansion plan for the HOPES program that was developed by the Department of Public Health during the fiscal year ending June 30, 1998 be implemented throughout Iowa. To accomplish this objective, the CDRT recommends that the family needs assessment used in the HOPES program be

expanded so that it is available statewide to all families of newborns. We suggest that following the hospital-based assessment, every family of a newborn be offered a series of two or three home visits by a professional or paraprofessional knowledgeable in and capable of assessing family dynamics and needs. Visits for a longer time frame should be offered to those families assessed by the professional as needing more education and support. The initial visits, as well as the longer term visits, should be provided to the extent possible under Title XIX and private insurance, with public funds available to supplement these sources. To aid in the continuation and expansion of home visiting services to Iowa's families, it is further recommended that the HOPES program appropriation be increased to $1,244,000 and the Iowa Morbidity and Mortality Prevention component of Healthy Families of Iowa annual funding be increased to $330,000. Additionally, it is recommended that the budget of the Iowa Child Abuse Prevention Fund be increased by $165,000 to permit a significant increase in their current budget allocation to home visits.

Background Statement 3. The CDRT has chosen to conduct retrospective reviews of child deaths. This method was selected so that all records related to the child, such as autopsies and law enforcement investigations, would be complete prior to the reviews. The drawback to this method is that if some part of the death investigation was not adequately completed or if questionable information exists on reports, it is most likely too late to gather that information. In addition, with a retrospective review system, follow-up checks on the safety of surviving siblings, the involvement of vital community agencies in the investigation, or public education endeavors cannot be accomplished in a timely enough manner.

Several states, notably North Carolina, Colorado, and Missouri have developed statewide systems of county multidisciplinary child death review teams. These teams meet immediately following the death of a child to pool their information, share what has been done for a thorough review of the circumstances of the death, determine what else needs to be done, conduct public education activities for prevention of future child deaths, and send reports of their reviews to the state child death review team. Communication and sharing of records expedites the review process at all levels and helps assure complete and thorough review of each death by two competent panels of reviewers, one at the local level and one at the state level.

In Iowa, four counties (Polk, Woodbury, Dubuque, and Scott) have developed local review teams. Most of these teams review only infant deaths or child abuse-related deaths at the present time. However, the immediate availability of the perspectives of a variety of professionals has proven valuable in assuring that all aspects of these deaths are thoroughly reviewed. As with the state team, the focus of these teams is to use what is learned from reviews to prevent future deaths.

Recommendation 3. (This recommendation was also made in the January, 1997 and 1998 reports.) The CDRT recommends establishment of a statewide system of local or regional child death review teams, which would review deaths of all children through age six and share their findings and information with the state team. It is further recommended that these teams be permitted the same statutory authority given to the state CDRT to gather and review information related to child deaths. The CDRT proposes that the team establish contacts in Iowa counties (Black Hawk, Johnson, Linn, and Pottawattamie) which have consistently had ten or more child deaths annually but have not yet established a local or regional child death review system, to discuss the need for a local review team. For Johnson county, contact would potentially be made with the University of Iowa Hospital and Clinics since the vast majority of Johnson county deaths occur at that facility where many of Iowa's most severe trauma and disease cases are sent for treatment. CDRT team members would share experiences of other states and of the Iowa counties with review teams already in existence. Members of the CDRT and possibly of existing local teams would provide on-site and telephone assistance to the local entities that are willing to implement their own review system and cooperatively share information. In addition, local teams that are already in existence should review deaths of all children through age six who die, thus broadening the age range and scope of cases they currently review.

Background Statement 4. Iowa law mandates that children up to the age of six years must be properly restrained when they are passengers in a motor vehicle. When young children die in motor vehicle crashes, and they are not properly restrained, the driver of the vehicle in which the child rode is usually not charged with violating this law. Separate from the issue of responsibility for causing the accident, it does not appear that the child restraint issue is routinely considered. However, the driver of the car in which the child was a passenger is the individual who should be given the ultimate and final responsibility for carrying unrestrained or improperly restrained child passengers, regardless of whether the driver caused the accident. In addition, aside from possible injuries faced should an accident occur, children who are not properly restrained face potential nonfatal injuries when the driver accelerates or stops suddenly. Currently, Iowa imposes a $25 fine on an operator of a motor vehicle who has an improperly restrained passenger under the age of six in their vehicle.

Recommendation 4. The CDRT recommends raising the fine for driving with an improperly restrained child under six years of age in a motor vehicle to $100. Stricter penalties and enforcement of this magnitude of a fine should help deter drivers from having improperly restrained children in their moving vehicles and would not necessitate an accident before the issue of prevention is addressed by law enforcement.

Background Statement 5. Although Iowa law mandates that an autopsy be performed in all cases of suspicious deaths of children under the age of two years, county medical examiners do not always require that these autopsies be performed. Toxicology studies on the child and people in the household vehicle are infrequently ordered. Reviews by the CDRT have indicated that in a significant number of deaths whose manner was designated as natural, accidental or homicide, and where no autopsy or toxicology study was performed, questions were raised about the possibility that a child had been physically abused or exposed to drugs prior to its death. While autopsies would not have prevented the deaths of these children, it is highly possible that evidence of previous injuries or drug exposure would have been identified. Thus, perpetrators would have been prosecuted, and other children in the household could have been removed from unsafe situations in a timely manner. Further, toxicology studies are not always performed on the caretakers or drivers of vehicles involved in the deaths of these children, resulting in failure to identify the effects of drugs or alcohol on the deaths and the ability of law enforcement officials to follow up on these factors.

Recommendation 5. (This recommendation was also made in the January, 1997 and 1998 reports.) The CDRT recommends that the performance of an autopsy including toxicology studies be required for every death of a child through age six with the exception of children who are known to have died of a disease process while attended by a physician. In addition, we recommend full body x-rays of the bodies of children who die before their second birthday, and immediate drug screens of caretakers and people having access to the child prior to the death.

Background Statement 6. Medical research and the resulting publications have long substantiated the role of secondhand tobacco exposure in the deaths of infants, primarily from prematurity and Sudden Infant Death Syndrome. Smoking during pregnancy has been shown to be a major risk factor for both premature birth and SIDS. When prone sleeping position is removed as a risk factor for SIDS, smoking emerges as the next most significant risk for Sudden Infant Death Syndrome.

Although birth certificates have a place to record the use of tobacco by the mother during pregnancy, this information may not be recorded or may be inaccurate due to the mother's unwillingness to admit to a behavior that could be harmful to her child in utero. Exposure of an infant to secondhand smoke either at home or at a daycare provider's residence may be noted on an Infant Death Scene Investigation, if one is done, but this information has usually been sketchy.

Recommendation 6. The CDRT recommends the performance of cotinine (a metabolite of nicotine) testing on all infants who die suddenly and unexpectedly in Iowa to accurately determine the potential role of tobacco exposure as a risk factor in their deaths. It is suggested that funding for this testing should come from state taxes on tobacco products. This information would prove invaluable in planning and directing future anti-smoking education efforts statewide, and more accurately assessing the influence that tobacco exposure has on Iowa's infant mortality rate.

RECOMMENDATIONS TO STATE AGENCIES

Background Statement 1. Death certificates need to be filled out completely and accurately by funeral home directors, attending physicians, and county medical examiners, and the final manner and cause of death needs to be filed in a timely manner. The information death certificates contain is vital to the Iowa Department of Public Health - Bureau of Vital Records, the CDRT, and other programs compiling incidence and demographic reports for state and federal agencies about deaths occurring in Iowa. When death certificate information is incomplete, incorrect, or missing, all aspects of their use are threatened.

Efforts are ongoing within the Iowa Department of Public Health Bureau of Vital Records to ensure complete and accurate reporting. The bureau is currently implementing electronic filing of death certificates. This project will improve timeliness and accuracy of death reporting to the state.

Recommendation 1 - *to the Iowa Department of Public Health Bureau of Vital Records.* The CDRT recommends that efforts be ongoing and increased to educate those individuals responsible for completing and filing death certificates in their responsibilities and the need for accurate and complete information and timely filing. The team further recommends that available sanctions be enforced for individuals who fail to adequately perform these duties. (This recommendation was also made in the January, 1997 and 1998 reports.)

Background Statement 2. Attending physicians and county medical examiners often fail to complete those areas on the death certificate in which they should identify the underlying cause(s) of death in all manners of death, as well as location, time and brief details of accidental or homicide deaths. Delays in the filing of death certificates are almost exclusively the result of delays by physicians in completing and signing their areas. County medical examiners may sign a death certificate listing the manner of death as "pending further investigation" and fail to file an amended certificate listing the final determined manner and cause. In order to meet its state and federal reporting obligations, the Bureau of Vital Records must close its files on deaths by June 30 of the year following the year in which the deaths occurred. For accuracy of state reports and identification of problems and trends, original death certificates and amendments must be filed according to that timeline.

In March 1997, the State Medical Examiner's office began gathering information regarding timeliness and completeness of the "Report of Investigation by Medical Examiner," as well as autopsies. Letters are sent to those county medical examiners not meeting compliance criteria.

Recommendation 2 - *to the Office of the State Medical Examiner.* The CDRT recommends increased efforts to obtain from attending physicians and county medical examiners timely, complete, and accurate information on autopsies, death certificates, and amendments.

Background Statement 3. When children die as a result of their parents' ignorance, neglect or aggression, there are often surviving siblings and unrelated children residing in the home. During reviews of such deaths, the CDRT has expressed concern for the safety and well being of these surviving children.

When the Department of Human Services is notified about the death of a child, caseworkers assess the needs of the surviving children.

Recommendation 3 - *to the Iowa Department of Human Services, Office of Field Support.* When a child dies due to a parent's or a caretaker's ignorance, neglect, or aggression, the CDRT recommends that ongoing efforts be made to visit the surviving children in the home within one month to assess the safety and well-being of these children and enable voluntary referrals to appropriate services. This visit is to be completed by DHS caseworkers knowledgeable in family dynamics and child abuse/neglect. (This recommendation was also made in the January, 1997 and 1998 reports. Although it is again reiterated in this year's report, it is recognized that the Iowa Department of Human Services has made great progress in addressing this issue. The assessment approach is now being used statewide to respond to reports of child abuse. The assessment approach mandates evaluating the alleged abuse, taking needed actions to safeguard the child, and engaging the family in services to enhance family strengths and address identified needs. This approach facilitates the provision of needed services to children and families.)

Background Statement 4. Many municipalities require the presence of smoke alarms in rental property, and it is generally recognized that smoke alarms can significantly reduce the number of deaths due to inhalation or burns in housefires. Unless a municipality also requires annual inspection of the

smoke alarms, they may be nonfunctional due to dead batteries or other defects, rendering them useless. There is no inspection requirement for smoke alarms in private dwellings or in rental units located in unregulated areas. In addition, other problems that threaten the safety of residents may be observed during home visits.

Recommendation 4 - *to all state agencies and their local units or contractors which conduct activities in the homes of their clients/ customers.* The CDRT recommends that the state agencies require each local unit or contractor, whenever conducting activities in the homes of their clients or customers, to check for the presence and operating status of smoke alarms and the presence of other safety hazards, and to recommend to residents when repairs, changes, or replacements are needed. (This recommendation was also made in the January, 1997 and 1998 reports.)

Background Statement 5. Because of the stress and immediacy that surrounds an accident or other circumstance involving the death of a child, the agencies responding to the death scene are often so engrossed in conducting their official duties and completing their required reports that some critical information about the death scene, circumstances, and involved people is often not documented.

To encourage gathering of this information, the Iowa Department of Public Health and the State Medical Examiner developed in 1995, and implemented statewide in 1996, an investigation protocol and form for documenting observations and findings about the scene of an infant death and the child's parents and caretakers. This information was distributed to emergency response units, law enforcement agencies, fire departments, and county medical examiners. Completion of the form is voluntary, and many areas have been slow to adopt its use. In many instances where the form is used and submitted to IDPH, there is still much missing information. Examples of important observations that are frequently not recorded include:

- use or non-use of appropriate vehicle occupant restraints;
- position of the child when found;
- child's type and condition of clothing;
- observation of drug, alcohol, or tobacco use;
- description of the temperature of the child's body; and,
- emotional affect of adults and children at the scene.

Such information is of great importance to those who later investigate the death, as well as to the CDRT in its reviews. In addition, since many counties and communities rarely have an infant death in their jurisdiction, death scene personnel may not get experience with the protocol and report forms. Therefore, they may not complete the information adequately, if at all.

Recommendation 5 - *to the Iowa Department of Public Health Bureau of Emergency Medical Services and the Iowa Department of Public Safety.* The CDRT recommends that all emergency response units, law enforcement agencies, and fire departments follow the Infant Death Scene Investigation Protocol, and that the report forms be filled out and submitted as quickly as possible to the proper entity. It is further recommended that information regarding use of this protocol and report form be included in the curriculum of the Iowa Law Enforcement Academy and in all programs in the state that train emergency medical services and fire fighting personnel. (This recommendation was also made in the January, 1997 and 1998 reports.)

Background Statement 6. Although Iowa law now waives the liability of institutions within the state in releasing information to the CDRT, difficulty still exists in obtaining information regarding Iowa children who die out of state or were medically treated out of state, and for non-Iowa residents who die in Iowa. In particular, out of state death certificates and hospital medical records are very difficult for the CDRT staff to obtain. Most of the institutions and state agencies require a parent-signed release form to release information to Iowa's CDRT. Improved access to medical records across state lines would facilitate operation of the CDRT and help provide team members with more complete information for case review.

Recommendation 6 - *to the Commission of Uniform State Laws.* The CDRT recommends that the Commission of Uniform State Laws propose legislation in this state and promote the passage of legislation in other states which would facilitate the exchange of medical, investigative, or other information pertaining to a child death. Such legislation should include the following language: " A person in possession or control of medical, investigative, or other information pertaining to a child death and child abuse review shall allow the reproduction of the information by the Child Death Review Team of another state operating substantially in conformity with the provisions of this chapter, to be used only in the administration and for the duties of that Child Death Review Team and provided that state grants reciprocal exchange of such child death

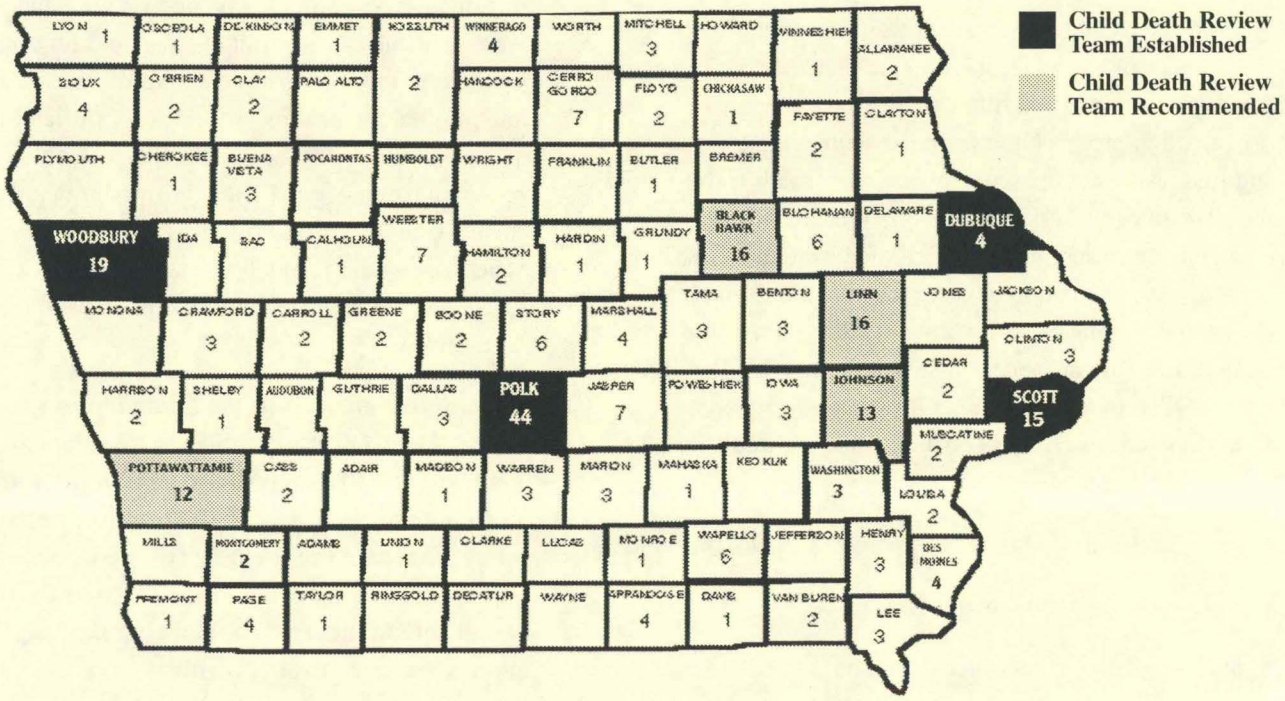
information to Iowa's Child Death Review Team. Information and records which are otherwise confidential remain confidential under this section. A person does not incur legal liability by reason of releasing information to a Child Death Review Team as required under this section." (This recommendation was also made in the January, 1998 report.)

Background Statement 7. Several 1997 SIDS deaths and positional asphyxia deaths occurred at daycare provider or foster homes. The major risk factor for these two causes of infant death is inappropriate sleep environment. Information collected for 1997 SIDS and positional asphyxia cases show that most of these infants were placed on a surface other than a firm crib mattress for sleep. Most of these infants were put down in a prone position, and they may have had an adult blanket or several infant blankets in the bed with them. Very often, the childcare provider's home **was not smoke free.** In addition, when the infant was found not breathing, the care provider often was not knowledgeable in CPR, so time elapsed between when the child was found and a trained person came to the scene to begin performing this emergency procedure.

Recommendation 7 - ***to the Iowa Department of Human Services.*** **The CDRT recommends that all foster care parents and all licensed in-home daycare providers be required to learn and be certified in child and infant CPR and be required to be recertified in this procedure annually. In addition, foster parents and in-home daycare providers should be required to have extensive education regarding appropriate sleep practices and environment for infants. Their homes should be assessed for secondhand smoke exposure before they are accepted into the foster care program or before they can receive a license to do in-home childcare.**

1997 Deaths of Children 6 Years of Age and Under by County of Residence of Time of Death

The following map shows counties of residence for Iowa children who died in 1997.



Out of state children who died in Iowa are as follows:

OUT OF STATE RESIDENTS

State	Deaths	State	Deaths
Illinois	5	North Dakota	1
Nebraska	2	Minnesota	1
Missouri	2	Kansas	1

Ages of Children at Death

The youngest of the 307 children who died in 1997 was minutes old, and the oldest of those children was six years, eleven months and two days old. For analysis in this report, the three age classifications most commonly used for statistical purposes have been utilized: birth through 28th day (neonatal); 29th through 364th day (post-neonatal); and, one through six years (child).

1997 DEATHS BY AGE GROUP

Age Group	Total	Percent of 1997 Deaths
Neonatal	**159**	**51.8%**
Post-Neonatal	**82**	**26.7%**
01 Months -	20	
02 Months -	17	
03 Months -	16	
04 Months -	6	
05 Months -	9	
06 Months -	1	
07 Months -	3	
08 Months -	3	
09 Months -	1	
10 Months -	3	
11 Months -	3	
Child	**66**	**21.5%**
01 Years -	23	
02 Years -	16	
03 Years -	9	
04 Years -	4	
05 Years -	10	
06 Years -	4	

Gender

In any given time period, more male children than female children are born and more male children than female children die. In 1997, Iowa child deaths followed this trend with 62.9% of the 307 children who died being males, and only 37.1% being females.

DEATHS BY GENDER

Age Group	Gender	Number	Percent of 1997 Deaths
Neonatal	male	98	31.9%
	female	61	19.9%
Post-neonatal	male	49	16.0%
	female	33	10.7%
Child	male	46	15.0%
	female	20	6.5%
Total Deaths	**male**	**193**	**62.9%**
	female	**114**	**37.1%**

Age Groups by Race/Ethnicity and Gender

The following table shows 1997 child deaths by gender and race/ethnicity. It should be noted that the race/ethnicity attributed to the child is that listed on the birth certificate as the race/ethnicity of the mother.

TOTAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	167	98	86.3%	265
Native American		2	0.7%	2
Hispanic	9	7	5.2%	16
Black	13	5	5.8%	18
Asian	4	2	2.0%	6
Total	**193**	**114**	**100%**	**307**

NEONATAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	84	51	85.0%	135
Native American		1	0.6%	1
Hispanic	4	4	5.0%	8
Black	8	3	6.9%	11
Asian	2	2	2.5%	4
Total	**98**	**61**	**100%**	**159**

POST-NEONATAL DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	41	30	86.6%	71
Native American			0.0%	0
Hispanic	4	1	6.1%	5
Black	3	2	6.1%	5
Asian	1		1.2%	1
Total	**49**	**33**	**100%**	**82**

CHILD DEATHS BY RACE/ETHNICITY AND GENDER

Race/Ethnicity	Male	Female	% of Total	Total
White	42	17	89.4%	59
Native American		1	1.5%	1
Hispanic	1	2	4.6%	3
Black	2		3.0%	2
Asian	1		1.5%	1
Total	**46**	**20**	**100%**	**66**

Manner of Death

The attending physician or medical examiner records the manner of death on each death certificate. Four specific manners of death are pertinent to deaths of children in this age range:

- **Natural** means the death was the result of some natural process, such as disease, prematurity/immaturity, or congenital defect. Deaths by this manner are considered by the CDRT to be nonpreventable, although it is acknowledged that some prematurity and congenital defects may be prevented through better preconception and prenatal care and counseling. The 1998 CDRT did not address these issues.
- **Accidental** means the death resulted from some unintentional act. This manner of death is the most effectively reducible by educating parents and caretakers on more appropriate methods and actions related to child raising.
- **Homicide** means the death was caused by a criminal act. The act committed by the perpetrator may not have been intended to cause the child's death.
- **Undetermined** means that investigation of the circumstances and examination through autopsy did not clearly identify the way in which the death occurred. In this category, we include deaths attributed to Sudden Infant Death Syndrome, since this cause is determined by the absence of other signs rather than by a clearly identified finding.

Death certificates for the 307 child deaths in 1997 determined manner of death as follows:

MANNER OF DEATH

Manner	Number	% of Deaths
Natural	228	74.3%
Undetermined	40	13.0%
Accident	27	8.8%
Homicide	12	3.9%
Total	**307**	**100%**

CAUSES OF DEATH

Each death certificate identifies the immediate cause of death and, where it can be determined, also identifies one or more conditions leading to the immediate cause (i.e., the immediate cause of death was due to or a consequence of some other disease or condition). Because the immediate cause of death in most instances is cardiac and/or respiratory arrest, we have followed the usual death analysis procedure of using the underlying cause (the disease or injury that initiated events resulting in the death) for our data and analyses. When the team reclassified the manner or cause of death, analyses are based upon manner and cause of death as determined by the CDRT through their case reviews. Note: Case determinations were based on evaluations of all materials available at the time the reviews were conducted.

Natural

The majority of the 228 deaths in this group were due to five causes: prematurity; congenital defects that were incompatible with life or following treatment to correct the defect; birth complications; infections; and, forms of cancer. As demonstrated in the following table, the predominant two causes of natural deaths were prematurity and congenital defects. The 228 natural manner deaths comprised 74.3 percent of all 1997 child deaths. Deaths from Sudden Infant Death Syndrome (SIDS), although coded as of natural manner on death certificates, are considered separately in this report as part of the undetermined category.

CAUSES OF NATURAL DEATHS

Cause	Number	% of Natural Deaths	% of All Deaths
Prematurity	122	53.5%	39.7%
Congenital Defects	61	26.7%	19.9%
Infection	29	12.7%	9.5%
Birth Complications	12	5.3%	3.9%
Cancer	4	1.8%	1.3%
Total	**228**	**100%**	**74.3%**

Further analysis of these causes, categorizing them by age groups, reveals the following:

AGE GROUPS AND CAUSES OF NATURAL DEATHS

Cause	Neonate	Post-Neonatal	Child	Total
Prematurity	110	11	1	122
Congenital Defects	26	21	14	61
Infection	7	7	15	29
Birth Complications	10		2	12
Cancer			4	4
Total	**153**	**39**	**36**	**228**
% of Natural Deaths	**67.1%**	**17.1%**	**15.8%**	**100%**

Accidental

In 1997, the deaths of 27 children resulted from accidental (unintentional) trauma. In 1996, 44 children died from accidental trauma. Accidents comprised 8.8 percent of the 1997 child deaths. The major causes involved motor vehicles (22.2% of accidental deaths), drowning (18.5% of accidental deaths), and positional asphyxia (18.5% of accidental deaths). Accidental trauma is considered preventable, but to prevent it requires the efforts of many people including the victim, the family, and the community. Education of the community, parents, and care providers can help prevent accidental trauma deaths among children.

CAUSES OF ACCIDENTAL DEATHS

Cause	Number	% of Natural Deaths	% of All Deaths
Asphyxia	1	3.7%	0.3%
All Terrain Vehicle Accident	1	3.7%	0.3%
Drowning	5	18.5%	1.7%
Drowning-Farm	2	7.4%	0.7%
Farm Machinery	1	3.7%	0.3%
Fire	1	3.7%	0.3%
Foreign Body Aspiration	1	3.7%	0.3%
Hyperthermia	1	3.7%	0.3%
Motor Vehicle Collision	5	18.5%	1.7%
Motor Vehicle Collision-Farm	1	3.7%	0.3%
Positional Asphyxia	5	18.5%	1.6%
Scald-Burn	1	3.7%	0.3%
Suffocation	2	7.5%	0.7%
Total	**27**	**100%**	**8.8 %**

The majority (74.1%) of accidental trauma deaths occurred in children one year of age or older.

AGE GROUPS AND TYPES OF ACCIDENTAL DEATHS

Type	Neonatal	Post-Neonatal	Child	Total
Asphyxia			1	1
All Terrain Vehicle Accident			1	1
Drowning			5	5
Drowning-Farm			2	2
Farm Machinery			1	1
Fire			1	1
Foreign Body Aspiration			1	1
Hyperthermia			1	1
Motor Vehicle Collision		1	4	5
Motor Vehicle Collision-Farm			1	1
Positional Asphyxia	1	3	1	5
Scald-Burn		1		1
Suffocation		1	1	2
Total	**1**	**6**	**20**	**27**
% of Accidental Deaths	**4%**	**22%**	**74%**	**100%**

Homicide

Twelve children were homicide victims in 1997. Homicides accounted for a total of 3.9 percent of child deaths in 1997. Seventy-five percent of homicides were from Shaken Baby Syndrome.

CAUSES OF HOMICIDE DEATHS

Cause	Number	% of Homicide Deaths	% of All Deaths
Shaken Baby Syndrome	9	75.0%	3.0%
Smoke Inhalation	1	8.3%	0.3%
Hyperthermia	1	8.3%	0.3%
Denial of Critical Care	1	8.3%	0.3%
Total	**12**	**100%**	**3.9%**

The relationship of the victim to the individual who committed or was accused of committing the homicide varied, but a total of 75% of these crimes were committed by the mother (25%), father or foster father (25%), and mother's paramour (25%) combined.

RELATIONSHIP TO VICTIM

Relationship	Number
Both Parents	1
Father	2
Foster Father	1
Mother	3
Mother's Male Paramour	3
Babysitter	2
Total	**12**

Most 1997 homicide deaths occurred to infants greater than one month of age.

AGE GROUPS AND CAUSES OF HOMICIDE DEATHS

Cause	Neonatal	Post-Neonatal	Child	Total
Shaken Baby Syndrome		5	4	9
Smoke Inhalation			1	1
Hyperthermia		1		1
Denial of Critical Care	1			1
Total	**1**	**6**	**5**	**12**
% of Homicide Deaths	**8.3%**	**50.0%**	**41.7%**	**100%**

Undetermined

The team determined that there were 40 fatalities for which autopsies failed to pinpoint a specific manner of death. The cause of death in the majority (30) of these deaths was found to be SIDS. The remaining ten deaths were due to a variety of other causes. Undetermined manner accounted for 13 percent of all deaths in children through age six in 1997.

Sudden Infant Death Syndrome (SIDS) is certified as the cause of death when all other causes have been eliminated. Even though SIDS deaths are recorded on the death certificate as a natural manner of death, the CDRT considers all SIDS deaths to be undetermined based on the technical definition of SIDS.

CAUSES OF UNDETERMINED DEATHS

Type	Number	% of Undetermined Deaths	% of All Deaths
Other	10	25%	3.2%
SIDS	30	75%	9.8%
Total	**40**	**100%**	**13.0%**

AGE GROUPS AND CAUSES OF UNDETERMINED DEATHS

Cause	Neonatal	Post-Neonatal	Child	Total
SIDS	2	28		30
Other	2	3	5	10
Total	4	31	5	40
% of Undetermined Deaths	**10.0%**	**77.5%**	**12.5%**	**100%**

AGES AND GENDER OF UNDETERMINED DEATHS

Age	Male	Female	Total
Neonate			
< 1 Day	1	1	2
Post-neonatal			
01 Month	1		1
02 Months		1	1
03 Months			0
04 Months	1		1
05 Months			0
06 Months			0
07 Months			0
08 Months			0
11 Months			0
Child			
01 Year	3		3
05 Years	1	1	2
Total	**7**	**3**	**10**

AGES AND GENDER OF SIDS DEATHS

Age	Male	Female	Total
Neonate			
20 Days	1		1
27 Days		1	1
Post-neonatal			
01 Month	2	3	5
02 Months	5	3	8
03 Months	3	3	6
04 Months	2		2
05 Months	3		3
06 Months		1	1
07 Months		1	1
08 Months		1	1
11 Months	1		1
Total	**17**	**13**	**30**

RACE/ETHNICITY OF CHILDREN WHO DIED OF SIDS

Race	Count	Percent
White	26	86.6%
Hispanic	2	6.7%
Black	2	6.7%
Native American	0	0.0%
Asian	0	0.0%
Total	**30**	**100%**

The majority of SIDS deaths occurred while a parent was caring for the infant, and most 1997 SIDS deaths occurred in the month of September. Most SIDS deaths usually occur during winter months.

CARE PROVIDER AT TIME OF DEATH FOR SIDS CASES

Parent	21	70.0%
Grandparent	3	10.0%
Babysitter	3	10.0%
Foster Parent	2	6.7%
Aunt	1	3.3%
Total	**30**	**100%**

SIDS DEATHS BY MONTH

Month	Deaths
January	2
February	2
March	2
April	2
May	4
June	0
July	2
August	2
September	6
October	2
November	2
December	4
Total	**30**

Risk factors for SIDS include prenatal smoking, secondhand smoke exposure after birth, soft bedding, overheating, and most especially, prone sleeping position.

PRENATAL SMOKING BY MOTHER FOR INFANTS WHO DIED OF SIDS

Yes	16	53.3%
No	13	43.4%
Unknown	1	3.3%
Total	**30**	**100%**

SECOND HAND SMOKE EXPOSURE BY INFANTS WHO DIED OF SIDS

Yes	15	50.0%
No	7	23.3%
Unknown	8	26.7%
Total	**30**	**100%**

BEDDING AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS

Inappropriate	16	53.3%
Appropriate	1	3.3%
Unknown	13	43.4%
Total	**30**	**100%**

SLEEP POSITION AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS

Face Down	20	66.7%
Face Up	4	13.3%
Unknown	6	20.0%
Total	**30**	**100%**

SLEEPING LOCATION AT TIME OF DEATH FOR SIDS CASES

Adult Bed	1	3.3%
Adult Bed (Co-sleeping)	4	13.4%
Adult Bed (Piled Blankets)	1	3.3%
Bassinet	1	3.3%
Crib	11	36.8%
Floor	1	3.3%
Other (Mom's Chest)	1	3.3%
Other (Playpen)	1	3.3%
Other (Swing)	1	3.3%
Sofa	2	6.7%
Waterbed	2	6.7%
Waterbed (Co-sleeping)	1	3.3%
Unknown	3	10.0%
Total	**30**	**100%**

THERMAL ENVIRONMENT AT TIME OF DEATH FOR INFANTS WHO DIED OF SIDS

Appropriate	6	20.0%
Inappropriate	3	10.0%
Unknown	21	70.0%
Total	**30**	**100%**

The mothers of children who died of SIDS or undetermined causes were slightly more likely to have been unmarried than married when the child was born. The ratio of unmarried to married mothers was 1.4:1 for SIDS mothers, and 2:1 for the mothers of children who died from an undetermined cause.

MOTHER'S AGE/MARITAL STATUS AT BIRTH OF CHILDREN WHO DIED OF SIDS

Age	Married	Unmarried	Unknown	Total
19 and Under	1	6		7
20 - 30	10	11		21
31 - 40	1			1
Age Unknown			1	1
Total	**12**	**17**	**1**	**30**

WHAT DO THE DATA TELL US?

Where are these deaths occurring?

There are four counties which have consistently experienced more than ten child deaths each year and do not yet have a local or regional child death review team: Black Hawk, Johnson, Linn, and Pottawattamie. Each of these four counties contains at least one major city. With a higher number of residents in an area, more deaths would be expected to occur, so it is not surprising that these four counties accounted for 57 of the 307 (18.6%) child deaths in Iowa in 1997. Together with the four counties (Polk, Woodbury, Scott, and Dubuque) that already have a local team in place, these counties account for 139 of the 307 (45.3%) total child deaths in Iowa for 1997.

How old are these children at the time of death?

The vast majority of children who die in Iowa in any given year are neonates. In 1997, 51.8 percent of the children who died in our state were between the ages of one and twenty-eight days. Slightly more infants died than children: 26.7 percent and 21.5 percent respectively. Prematurity, congenital defects, and SIDS are the primary causes of death for children younger than seven years.

Infants are more susceptible to death from congenital anomalies than older children. Though children may survive through their first month of life, most acute, underlying congenital conditions cause death by the first birthday. In addition, Sudden Infant Death Syndrome, by definition, affects only infants. Since SIDS is the leading cause of death for infants ages one month to one year, many of Iowa's infant deaths are attributable to SIDS.

Which children are likely to die?

As previously noted, more male children than female children are born, and more male children than female children die in any given year. During 1997, Iowa's child deaths followed this trend. More than half (62.9%) of the young children

dying in Iowa were males. This trend held for all three age groups: neonates, infants, and children.

The majority of deaths were among whites for all age groups, followed by Blacks for both neonatal and infant deaths, and by Hispanics for child deaths. Because Iowa's population is vastly composed of Caucasians, these findings are to be expected. Deaths among Blacks, Hispanics, Asians, and Native Americans all raise the question whether prevention messages are being adequately disseminated to these often hard to reach populations or if there are barriers that must yet be overcome to improve educational efforts (language, cultural issues, etc.). Actual numbers of deaths for these populations remain low due to the relatively few Iowa residents in each of these ethnic/racial categories.

What are the manners and causes of death?

The four manners of death pertinent to children through age six are natural, accidental, homicide, and undetermined. These manners of death were detailed in the previous section of this report.

- **Natural deaths**

Natural deaths are essentially not preventable, but can be reduced by better preconception counseling, prenatal care and education, and by new disease cures. If mothers would stop smoking during pregnancy and would avoid exposure to secondhand smoke while pregnant, many infant deaths from prematurity could be prevented. The vast majority of deaths listed as natural manner are from premature births (53.5%) and congenital defects (26.7%), followed by infections (12.7%), birth complications (5.3%), and then cancers (1.8%). Strategies to reduce the large number of natural manner deaths include: better and more widespread preconception education and counseling, especially for high risk parents who have had a previous child with a birth defect; improved access to quality prenatal care; enhanced prenatal education, especially smoking cessation programs; and, expanded programs for home visits to new parents.

A three month old infant was found by his father lying unresponsive in his carseat. Efforts to revive him at the hospital were unsuccessful. After a thorough post mortem, death scene investigation and extensive clinical history was evaluated by the medical examiner, it was determined that the child died of pneumonia, as a consequence of acquired immunodeficiency syndrome. Later, family members were tested for the virus so that appropriate therapy could be given to the parents and to the surviving siblings if they were found to be HIV positive.

- **Accidental trauma deaths**

Accidental trauma deaths are a manner of death that is considered preventable. In 1997, 8.8 percent of all child deaths in children through age six were from accidental trauma such as drowning, farm-related accidents, house fires, and positional asphyxia. Three main causes of death resulted in the majority of 1997 accidental deaths of children through age six: motor vehicle related trauma (22.2%), drowning (18.5%), and positional asphyxia (18.5%). No deaths were attributable to firearms in 1997.

Most of the accidental trauma deaths were among children older than one year of age (74.1%), and only one death in this manner occurred in a neonate.

A dramatic increase in accidental deaths caused by positional asphyxia was seen for 1997 deaths. Positional asphyxia occurs when an infant is placed, usually in a prone position, on a soft, inappropriate surface for sleep. These surfaces primarily include sofas, adult beds, and waterbeds. Sofa cushions, adult covers, pillows, etc. may prove hazardous to young children who cannot extricate themselves from between cushions or from under heavy covers.

Since prevention education is key to decreasing the number of child deaths from accidental trauma, prevention messages regarding appropriate infant sleeping practices, child safety restraint system use, safe water recreation activities, safe biking, and fire prevention actions, must be reinforced in every segment of Iowa's population. In addition, these messages must be carried to minority populations in their own language, if different from English, and in a culturally sensitive and aware fashion. Prevention education should continue even when the number of deaths from a specific type of accidental trauma has decreased, as in the case of firearm-related deaths.

A 14 month old child was playing outside on his parent's acreage while his parents were doing farm chores. He fell into an uncovered manure pit and drowned.

A two year old child was outside playing while his father worked near their trailer home. He wandered away and was later found at the bottom of a pond in the trailer court.

A mother and her two year old child were grocery shopping. A food worker was giving out samples of hot dogs. The child was given a sample to eat, but soon began to choke. An EMT, who happened to be shopping too, was unsuccessful in his attempts to dislodge the food wedged in the child's esophagus. During transport to the hospital, paramedics successfully removed the offending food with forceps, however the child later died.

A young mother put her two small children, ages one and three, in a shallow tub of water for their evening bath. She then closed the door and began talking on the telephone. She later found the tub overflowing and the one year old floating face down in the water. The older sibling had turned on the faucet while the children were left unattended.

- **Homicides**

Homicides accounted for twelve deaths in 1997. Mothers accounted for 25 percent of the perpetrators in these deaths, while the mother's male paramour accounted for 25 percent, and fathers (natural and foster) accounted for 25 percent. Homicide deaths are another area where prevention is possible to decrease the number of future deaths. Homicide deaths due to shaken/slammed baby syndrome, blunt trauma to the head/abdomen, and stabbings, all indicate anger and frustration on the part of the caregiver. Parents and caregivers need viable and easily accessible outlets, i.e. respite care or someone to call, when stresses of childcare escalate. Improved dissemination of information and resources to all new parents regarding parental stress and options could potentially assist in decreasing future homicide deaths of young children.

Homicide deaths also occur because of unwanted pregnancy that causes acute stress and panic at the time of birth. Improved education and counseling of teens, whether pregnant or not, regarding resources where they can go for help if put in this type of difficult situation, could help decrease future homicide deaths.

A five month old infant and her siblings were being cared for by their young father. Interrupting his activities with friends to check on the sleeping children, he returned to his card game and announced to everyone that the baby was unresponsive and might be dead. They called for help, but the child died. The death was ruled a homicide due to shaken/slammed baby syndrome. The father plead guilty to manslaughter and is serving a 12 year sentence.

- **Undetermined manner of deaths**

Undetermined manner of deaths includes SIDS deaths and other deaths that cannot be classified as natural, accidental, or homicide deaths. Most of the deaths included in this manner are ruled Sudden Infant Death Syndrome. SIDS is certified as the cause of death when all other causes of death have been eliminated after evaluation of a thorough autopsy, death scene investigation, and clinical history. SIDS is therefore a diagnosis of exclusion, affixed only after all known and possible causes of death have been ruled out.

Most SIDS victims are between the ages of two and four months at the time of death. For 1997 SIDS cases, over one half (53.3%) were between two and four months of age, and ninety percent (90%) were six months of age or younger at the time of death. Slightly more males (56.7%) than females (43.3%) died of SIDS in 1997. More SIDS infants were born to single mothers (56.7%) than to married couples (40.0%), and the majority of mothers were young, (that is, less than 22 years of age) at the time of the birth (53.3%).

Research has shown that placing babies on their backs for sleep reduces the incidence of SIDS deaths. The media periodically air public service announcements to inform parents and other caregivers of this simple lifesaving action, and information is posted in most medical offices and clinics. Although many people are still unaware or disbelieving, the nationwide decrease in SIDS deaths is widely attributed to this measure. This recommendation was changed from back or side sleeping position in 1996. Since the original Back to Sleep Campaign began in 1994, the number of SIDS deaths has dramatically decreased both nationally and statewide. In 1993, before the campaign began, 54 SIDS deaths occurred in Iowa, compared to 27 SIDS deaths in 1996, and 30 SIDS deaths in 1997. It should be noted however that Iowa's birth rate also decreased during that time. Therefore, a better way to look at this decrease is the number of annual SIDS deaths per 1,000 live births (the total number of births was 36,641 for the state of Iowa for 1997). The SIDS death rates for the past five years are as follows:

1993 - 1.43 deaths/1000 live births;
1994 - 1.37 deaths/1000 live births;
1995 - 1.22 deaths/1000 live births;
1996 - .73 deaths /1000 live births;
1997 - .82 deaths /1000 live births.

Of note is the national SIDS rate, which is .69 per thousand live births (1997). Iowa has not yet matched this rate, and it is of considerable concern that Iowa's 1997 rate was slightly elevated from the 1996 rate. Although this increase was not statistically significant, it poses the question whether SIDS educational efforts provided by primary care providers are reaching high risk groups across the state. Not all clinics, hospitals, child care providers, and other groups who deal directly with new parents have updated brochures about back sleeping or are concerned enough about SIDS to stress the importance of proper sleep practices. In addition, smoking cessation during pregnancy and keeping infants in a smoke free environment are not emphasized as much as back sleeping when discussing SIDS, yet research has shown smoke

exposure to be a primary risk factor for Sudden Infant Death Syndrome.

For 1997 SIDS cases, the infant's sleeping position at the time of death was known for 24 of the 30 babies who succumbed to SIDS. Of those children, 83 percent were sleeping in a prone position when they died, and the remaining 17 percent were face up. Fifty-three percent of the mothers of SIDS infants admitted to smoking during pregnancy. Of the 22 infants for whom exposure to second hand smoke was known, 68 percent were exposed to smoking in their living environment after birth.

Along with sleep position, many SIDS children were victims of other hazards in their sleep environment at the time of death. It becomes obvious that all risk factors for SIDS and other sleeping environment-related causes of infant death need to be addressed with parents, pregnant women, grandparents, and other care providers by health professionals in an aggressive, consistent, and comprehensive manner. Sleeping surface and bedding are two other well-established risk factors for SIDS. Sleeping surface was known for 27 SIDS cases. Of these infants, only 40.1 percent had been placed for sleep in a crib, and most of the other babies had been laid down on adult beds, waterbeds, sofas, or other improper sleeping surfaces. For the 17 infants for whom bedding type was known, all but one had been covered with adult blankets, heavy quilts, or other inappropriate bedding materials. Clearly, lack of information and knowledge on the part of parents or care providers poses enormous risks for infants.

A two-month-old baby, suffering a minor respiratory infection, was put to bed for the night in a plastic-lined bassinet. Several afghans were in the baby's bed with one being used as a pillow. Her mother, a smoker, found the baby stiff and blue in the morning. After autopsy and a complete death scene investigation, the death was ruled to be Sudden Infant Death Syndrome.

During 1997, five infants died from positional asphyxia. These deaths were classified as accidents. Although they were previously discussed, these cases are noted here since the risk factors for positional asphyxia and Sudden Infant Death Syndrome both center on improper sleep practices.

What Actions and Strategies Could Prevent Future Deaths?

Actions and Strategies that Could Prevent Future Deaths of Natural Manner

1. Both prospective parents (father and mother) should be physically mature and healthy, both prior to conception of the child and throughout the pregnancy. Damaging substances of any sort, including alcohol, tobacco, certain prescription medications, and all street drugs must be avoided.

2. Prenatal care should be entered into as early as possible, and regular prenatal visits should be continued. Prenatal visits should include intensive smoking cessation counseling if the mother currently smokes. In addition, evaluation of second-hand smoke exposure to the mother should be conducted early on in the pregnancy, and the potential risks of such exposure should be carefully explained to her.

3. Prenatal visits should include patient-specific education and interventions aimed at modifiable risk factors such as tobacco, alcohol, and drug use.

4. Genetic counseling, available through the University of Iowa regional clinics or private sources, should be recommended to and utilized by parents with potential genetic problems or those who have given birth to children with genetic anomalies, to identify and make the parents aware of the possibilities of future problems.

5. All children should receive regular and timely wellness checkups at clinics or physicians' offices, and parents should be aware of and responsive to signs and symptoms of illness in their children, seeking medical attention as indicated. Families should be discouraged in using hospital emergency rooms as their only source of medical care, since many preventive activities such as immunizations may be missed at the time of care.

6. New parents should be thoroughly instructed regarding the appropriateness and timeliness of well child checkups.

7. Iowa's hard to reach populations, such as certain cultural and ethnic communities (Amish, Hispanic, and Asian, etc. populations), should have culturally-targeted education regarding the necessity for quality and timely prenatal care, the potential hazards of home births, and preventive care and practices relating to young children. This education should be done in the language most used by each specific population.

Actions and Strategies that Could Prevent Future Accidental Deaths

1. Children six and under should always be properly restrained when riding in motor vehicles of any type. Care should be taken that the child restraint device being used is of the correct type (i.e. infant, toddler, booster) and has been properly fitted to the child. The device should also be installed properly, and the child must be correctly positioned and fastened in the restraint system.

2. Children should ride in the rear seats of vehicles, and child safety door locks should be used when available. Automobiles should be kept locked when not in use.

3. Individuals who have demonstrated repeated unsafe driving should not be permitted to continue driving. Stronger penalties for multiple offense drivers should be instituted.

4. Bicycle helmet use should be required by law, and the requirement should be strongly supported by parents, teachers, and caregivers.

5. Parents and other drivers should check behind all motor vehicles, including farm equipment, before backing up any vehicle.

6. Parents, grandparents, foster parents, daycare providers, and other caregivers should learn first aid, administration of CPR, and the Heimlich Maneuver for infants and children.

7. Parents and caregivers should recognize and give only age-appropriate foods to infants and children with special attention to solids given before the age of four.

8. Extreme vigilance should be practiced whenever children are in, around, or near water, including bathtubs, pools, and larger bodies of water regardless of the water depth. Parents and caregivers need to be cautioned that bathtub rings are not safety devices and that children must never be left alone in the water, even momentarily. Children playing near lakes, ponds, and rivers should use flotation devices as a precaution. In addition, children should be taught to swim as early as possible.

9. Home pools should be surrounded by fencing and have locked gates, and wading pools should be emptied immediately after each use to prevent unsupervised play by children. Likewise, decorative ponds in residential areas should be fenced in to deter exploration by curious children.

10. Smoke alarms should be installed in every house, apartment, and trailer home and checked frequently to assure their continuing operability.

11. All Terrain Vehicles should never be operated by a child under the age of twelve. Young children should not ride on All Terrain Vehicles.

12. A responsible person should supervise children at play, especially if potentially dangerous equipment or hazardous apparatus is in or near the play area. This supervision is especially important in areas where open septic tanks, manure pits, or grain bins may be accessible to the children.

13. Firearms should be stored unloaded and in a locked receptacle, and ammunition should be stored in a separate, locked receptacle, with both keys unavailable to children.

14. Children should not ride on farm equipment unless it is in a closed cab that has securely fastened doors, and they are under the direct supervision of an adult.

Actions and Strategies that Could Prevent Future Homicide Deaths

1. Mothers should be cautioned about careful selection of individuals who care for their children. Reports of criminal history can be obtained at a reasonable charge from local police departments.

2. Inexperienced parents should be linked with a mentor or other supportive person to whom they can turn when they have questions or are stressed.

3. The frequency and content of public service announcements that illustrate the importance of parents or other caretakers taking a "time out" when the stress of child care becomes overwhelming should be improved.

4. Parents should be given a list of respite care resources/ options and emergency numbers at the time of hospital discharge after the birth of every new infant. These resources should also be discussed with pregnant women at their prenatal visits.

Actions and Strategies that Could Prevent Future SIDS and Other Undetermined Deaths

1. Media efforts to promote back sleeping should be stepped up. Updated Back to Sleep brochures and other educational materials should be widely distributed across the state to physician offices, public health nurses, public agencies, day-care providers, hospital OB departments, and other groups who deal directly with infants and their families.

2. Every baby should have its own sleeping place and should not share a sleeping place with parents, whether a potential shared place is a bed, a couch, a chair, or the floor.

3. Cribs, bassinets, and other sleeping places should be checked for firmness of mattress and absence of potential causes of smothering, choking, or rebreathing, such as pillows, adult blankets, wide spaces between mattress and sides, stuffed toys, and small items. Sofas, adult beds, and waterbeds should never be used as an infant bed or sleep surface.

4. Pregnant women, mothers, fathers, and other caregivers should be counseled about the severity of smoking hazards to children, both before and after their birth.

5. Pregnant women should be counseled as to the potential negative effects on their offspring of illicit drug use and alcohol use during pregnancy.

6. Parents, grandparents, and other care providers to neonates and infants should be educated about appropriate sleep position and sleep environment, and hazards of secondhand smoke to young children.

7. Physicians should repeatedly counsel pregnant females and parents of very young children about SIDS risk factors, especially if the mother is very young herself, either parent smokes, or the mother is not seeking consistent prenatal care.

8. Special efforts to educate non-English speaking pregnant women and their families about SIDS risk factor should be implemented.

9. Parents should be educated on selection of an appropriate daycare provider who is aware of and follows the "Back to Sleep" recommendations, and who provides a smoke-free home in which to care for children.

Report to the Governor
and General Assembly

IOWA CHILD DEATH REVIEW TEAM

■

DECEMBER 1998

APPENDICES

CHILD DEATH REVIEW TEAM MEMBERS
AND THE DISCIPLINES THEY REPRESENT

Michael Abrams, MD (to 3/98)
Family Practice

Randall Alexander, MD (to 7/98)
Pediatrics

Eric L. Book, MD
Health Insurance Industry

Christine O'Connell Corken
County Attorneys (from 6/98)

Joseph Cowley, PhD
Substance Abuse Counselors

Lois Fingerman
Domestic Violence

Francis Garrity, MD
State Medical Examiner's Office

Susan Gauger
Social Worker

Barbara Harre, MD (from 11/98)
Pediatrics

Melodee Hanes (to 5/98)
County Attorneys

Herman Hein, MD
Neonatology

Mary Ann Kerr, MSN
SIDS Coalition

Gerald Loos, MD (from 4/98)
Family Practice

Richard Rice
Mental Health Counselors

Melissa Sally Mueller
Emergency Medical Services

Lon Walker
Law Enforcement

Mona Walters
Emergency Room Nursing

STATE GOVERNMENT LIAISONS

Virginia Barchman
Attorney General's Office

Charlotte Burt
Department of Education

Scott Falb
Department of Transportation

Dan Moser (from 11/98)
Department of Public Safety

Jill France
Vital Records, IDPH

Julie Hamilton (to 6/98)
Department of Public Safety

Wayne McCracken
Department of Human Services

Edward Schor, MD
Department of Public Health

STAFF

Stephanie Pettit, PhD
Department of Public Health

CHAPTER 90
IOWA CHILD DEATH REVIEW TEAM

641-90.1(135) Purpose. The purpose of the child death review team is to aid in the reduction of the incidence of serious injury and death to children by accurately identifying the cause and manner of death of children through the age of six years.

641-90.2(135) Definitions.
"Team" means the Iowa child death review team.
"Unexcused absence" means failure by a team member to notify the chairperson of an anticipated absence from a team meeting.

641-90.3(135) Agency. The Iowa child death review team is established as an independent agency of state government. The Iowa department of public health shall provide staffing and administrative support to the team.

641-90.4(135) Membership. The membership of the review team is subject to the provisions of Iowa Code sections 69.16 and 69.16A, relating to political affiliation and gender balance. Review team members who are not designated by another appointing authority shall be appointed by the director of public health in consultation with the director of human services. Membership terms shall be for three years.

90.4(1) The review team shall include the following:

a. The state medical examiner or the state medical examiner's designee.
b. A certified or licensed professional who is knowledgeable concerning sudden infant death syndrome.
c. A pediatrician who is knowledgeable concerning deaths of children.
d. A family practice physician who is knowledgeable concerning deaths of children.
e. One mental health professional who is knowledgeable concerning deaths of children.
f. One social worker who is knowledgeable concerning deaths of children.
g. A certified or licensed professional who is knowledgeable concerning domestic violence.
h. A professional who is knowledgeable concerning substance abuse.
i. A local law enforcement official.
j. A county attorney.
k. An emergency room nurse who is knowledgeable concerning the deaths of children.
l. A perinatal expert.
m. A representative of the health insurance industry.
n. One other appointed at large.

90.4(2) Vacancies shall be filled in the same manner in which the original appointments were made. An appointment shall complete the original member's term.

90.4(3) Three consecutive unexcused absences shall be grounds for the director to consider dismissal of the team member and to appoint another. The chairperson of the team is charged with providing notification of absences.

641-90.5(135) Officers. Officers of the team shall be a chairperson and a vice chairperson and shall be elected at the first meeting of each fiscal year unless designated at the time of appointment. Vacancy in the office of chairperson shall be filled by elevation of the vice chairperson. Vacancy in the office of vice chairperson shall be filled by election at the next meeting after the vacancy occurs. The chairperson shall preside at all meetings of the team, appoint such subcommittees as deemed necessary, and designate the chairperson of each subcommittee. If the chairperson is absent or unable to act, the vice chairperson shall perform the duties of the chairperson. When so acting, the vice chairperson shall have all the powers of and be subject to all restrictions upon the chairperson. The vice chairperson shall also perform such other duties as may be assigned by the chairperson.

641-90.6(135) Meetings. The team shall meet upon the call of the chairperson, upon the request of a state agency, or as determined by the team. Robert's Rules of Order shall govern all meetings.

641-90.7(135) Expenses of team members. The members of the team are eligible for reimbursement of actual and necessary expenses incurred in the performance of their official duties.

641-90.8(135) Team responsibilities. The team shall perform the following responsibilities.

1. Collect, review, and analyze child death certificates and child death data, including patient rec-ords or other pertinent confidential information concerning deaths of children aged six or younger, and other information as the review team deems appropriate for use in preparing an annual report to the governor and the general assembly concerning the causes and manner of child deaths. The report shall include analysis of factual information obtained through review and recommendations regarding prevention of child deaths.
2. Recommend to the governor and the general assembly interventions to prevent deaths of children based on an analysis of the cause and manner of such deaths.
3. Recommend to the agencies represented on the review team and to other agencies changes which may prevent child deaths.
4. Maintain the confidentiality of any patient records or other confidential information reviewed.
5. Develop protocols for and establish a committee to review child abuse investigations which involve the death of a child.
6. The team may establish subcommittees to which the team may delegate some or all of the team's responsibilities set out in this rule.

641-90.9(135) Liaisons. The following individuals shall each designate a liaison to assist the team in fulfilling its responsibilities.

1. Director of public health.
2. Director of human services.
3. Commissioner of public safety.
4. Administrator of the bureau of vital records of the Iowa department of public health.
5. Attorney general.
6. Director of transportation.
7. Director of the department of education.

641-90.10(135) Confidentiality and disclosure of information. The team and liaisons shall maintain the confidentiality of all information and records used in the review and analysis of child deaths, including disclosure of information which is confidential under Iowa Code chapter 22 or any other provisions of state law. No information on individual deaths contained in the records described in this rule shall be disclosed except for the purposes of the team, committee or subcommittee meeting, and no confidential information received in preparation for or during the course of such meeting shall be removed from the meeting room except for further review as authorized by the team chairperson.

In preparation for review of an individual death by the team or its authorized committee or subcommittee, the chairperson of the team or the chairperson's designee is authorized to gather all information pertinent to the review. This information may include, but is not limited to, hospital records, physician's records, school records, day-care records, autopsy records, child abuse registry, investigation or assessment records, state public assistance records, traffic records, public safety records, law enforcement records, fire marshal's records, birth records, death records, and other relevant records necessary to conduct a complete review.

A person in possession or control of medical, investigative or other information pertaining to a child death and child abuse review shall allow the inspection and reproduction of the information by the department upon the request of the department, to be used only in the administration and for the duties of the Iowa child death review team. Information and records which are confidential under Iowa Code section 22.7 and chapter 235A, and information or records received from the confidential records, remain confidential under this rule. A person does not incur legal liability by reason of releasing information to the department as required under and in compliance with this rule.

641-90.11(135) Immunity and liability. Review team members and their agents are immune from any liability, civil or criminal, which might otherwise be incurred or imposed as a result of any act, omission, proceeding, decision, or determination undertaken or performed, or recommendation made as a review team member or agent provided that the review team members or agents acted in good faith and without malice in carrying out their official duties in their official capacity. A complainant bears the burden of proof in establishing malice or lack of good faith in an action brought against review team members involving the performance of their duties and powers.

A person who releases or discloses confidential data, records, or any other type of information in violation of this chapter is guilty of a serious misdemeanor.

These rules are intended to implement Iowa Code Supplement section 135.43.

[Filed 3/15/96, Notice 1/31/96-published 4/10/96, effective 5/15/96]

[Filed 7/10/98, Notice 4/22/98-published 7/29/98, effective 9/2/98]

EXCERPT FROM THE CODE OF IOWA

135.43 Iowa child death review team established—duties.

1. An Iowa child death review team is established as an independent agency of state government. The Iowa department of public health shall provide staffing and administrative support to the team.

2. The membership of the review team is subject to the provisions of sections 69.16 and 69.16A, relating to political affiliation and gender balance. Review team members who are not designated by another appointing authority shall be appointed by the director of public health in consultation with the director of human services. Membership terms shall be for three years. A membership vacancy shall be filled in the same manner as the original appointment. The review team shall elect a chairperson and other officers as deemed necessary by the review team. The review team shall meet upon the call of the chairperson, upon the request of a state agency, or as determined by the review team. The members of the team are eligible for reimbursement of actual and necessary expenses incurred in the performance of their official duties.
The review team shall include the following:

a. The state medical examiner or the state medical examiner's designee.
b. A certified or licensed professional who is knowledgeable concerning sudden infant death syndrome.
c. A pediatrician who is knowledgeable concerning deaths of children.
d. A family practice physician who is knowledgeable concerning deaths of children.
e. One mental health professional who is knowledgeable concerning deaths of children.
f. One social worker who is knowledgeable concerning deaths of children.
g. A certified or licensed professional who is knowledgeable concerning domestic violence.
h. A professional who is knowledgeable concerning substance abuse.
i. A local law enforcement official.
j. A county attorney.
k. An emergency room nurse who is knowledgeable concerning the deaths of children.
l. A perinatal expert.
m. A representative of the health insurance industry.
n. One other appointed at large.

3. The review team shall perform the following duties:
a. Collect, review, and analyze child death certificates and child death data, including patient records or other pertinent confidential information concerning the deaths of children age six or younger, and other information as the review team deems appropriate for use in preparing an annual report to the governor and the general assembly concerning the causes and manner of child deaths. The report shall include analysis of factual information obtained through review and recommendations regarding prevention of child deaths.
b. Recommend to the governor and the general assembly interventions to prevent deaths of children based on an analysis of the cause and manner of such deaths.
c. Recommend to the agencies represented on the review team changes which may prevent child deaths.
d. Maintain the confidentiality of any patient records or other confidential information reviewed.
e. Develop protocols for and establish a committee to review child abuse investigations which involve the death of a child.

4. The following individuals shall designate a liaison to assist the review team in fulfilling its responsibilities:
a. The director of public health.
b. The director of human services.
c. The commissioner of public safety.
d. The administrator of the division of vital records of the Iowa department of public health.
e. The attorney general.
f. The director of transportation.
g. The director of the department of education.

5. The review team may establish subcommittees to which the team may delegate some or all of the team's responsibilities under subsection 3.

6. *a.* The Iowa department of public health and the department of human services shall adopt rules providing for disclosure of information which is confidential under chapter 22 or any other provision of state law, to the review team for purposes of performing its child death and child abuse review responsibilities.
b. A person in possession or control of medical, investigative, or other information pertaining to a child death and child abuse review shall allow the inspection and reproduction of the information by the department upon the request of the department, to be used only in the administration and for the duties of the Iowa child death review team. Information and records which are confidential under section 22.7 and chapter 235A, and information or records received from the confidential records, remain confidential under this section. A person does not incur legal liability by reason of releasing information to the department as required under and in compliance with this section.

7. Review team members and their agents are immune from any liability, civil or criminal, which might otherwise be incurred or imposed as a result of any act, omission, proceeding, decision, or determination undertaken or performed, or recommendation made as a review team member or agent provided that the review team members or agents acted in good faith and without malice in carrying out their official duties in their official capacity. The department shall adopt rules pursuant to chapter 17A to administer this subsection. A complainant bears the burden of proof in establishing malice or lack of good faith in an action brought against review team members involving the performance of their duties and powers under this section.

8. A person who releases or discloses confidential data, records, or any other type of information in violation of this section is guilty of a serious misdemeanor.
95 Acts, ch 147, ß2; 97 Acts, ch 159, ß 3, 4
Legislative findings and purpose; 95 Acts, ch 147, ß 1
Subsection 6 amended
NEW subsections 7 and 8

Office of the Iowa State Medical Examiner
Wallace State Office Building, Des Moines, IA 50319-0167

REPORT OF INFANT DEATH SCENE INVESTIGATION BY MEDICAL EXAMINER

Central Office Use Only

_____
(Date of Receipt)

_____
(DOD Code)

_____
(COD Code)

_____
(ME Case Number)

Reports Attached (if available):

- ❑ Autopsy
- ❑ DHS Reports
- ❑ EMS
- ❑ ER
- ❑ Medical Records
- ❑ Police
- ❑ Toxicology

Please promptly call the Iowa Department of Public Health for notification of all infant deaths.
Call 1-800-383-3826 or fax 515-242-6384.

IDENTIFYING INFORMATION

Decedent (Name registered at Birth): _____
first middle last

Decedent's Home Address: _____
number & street/rural route/box # city, state zip county

Date of Birth: _____ (MM/DD/YY) Date of Death: _____ (MM/DD/YY)

BIOLOGICAL/ADOPTIVE PARENTS

Mother's Name: _____ _____ Date of Birth: _____
first middle last (MM/DD/YY)

Address: _____

Social Security Number: _____ Telephone: _____
(area code/number)

Father's Name: _____ Date of Birth: _____
first middle last (MM/DD/YY)

Address: _____

Social Security Number: _____ Telephone: _____
(area code/number)

DEATH SCENE

Infant put down to sleep? (Y/N)_____ When?_____ Where? _____

by Whom? _____

Infant's position (on back, side, stomach, other): _____

What was infant's usual sleeping position?_____

Did the baby do anything unusual in the last 24 hours? (Y/N)_____ Describe: _____

_____

Infant found: where in home (e.g., crib, etc.)? _____

by whom?_____

condition (stiff, mottled, etc.)? _____

Resuscitation? (Y/N)_____ by whom? _____

time started:_____ describe methods used: _____

CAREGIVER(S) AT TIME OF DISCOVERY

Name:_____ Age: _____ SS#: _____
first middle last

Address/phone: _____
(Complete if other than parents)

Type of Caregiver: _____ How long a caregiver to this infant?_____
(Professional, neighbor, etc.)

List all other persons present in residence from time child put down to when discovered unresponsive:
(include full name, date of birth, address and social security number)

_____

_____

_____

_____

Is the caregiver aware of any prior infant deaths? (Y/N)_____ If yes, give details: _____

_____

STATEMENT FROM OFFICIAL PRE-HOSPITAL RESPONDER(S)

Name(s): _____ Telephone: _____

Agency(s)/Address: _____

When did they arrive? _____

Condition of infant? Vital signs (pulse, respiration)?: _____

Observable injuries? _____

_____

Postmortem changes (rigor, etc.)? _____

Resuscitation attempted? (Y/N) _____ If yes, describe methods (e.g. CPR, IV, ET, I&O, suction): _____

_____

_____

Had infant been moved to location other than where first found? (Y/N)_____

By whom?_____

From where to where? _____

Why was infant moved? _____

_____

Describe precise position of infant as described by caretaker (i.e. face down, vomitus, blood, etc.):

_____

_____

_____

Describe precise position of infant as described by first responder if different from caretaker:

_____

_____

_____

Describe objects in sleeping environment (e.g. bedding materials: mattress, blankets, pillows, bumper pads, etc.)
Detail softness, compressibility, include condition of crib:(? loose slats, gap between mattress and frame, and was crib clean?):

_____

_____

_____

Any objects close to infant's face? (Y/N)_____ If yes, describe:_____

Could infant's face press into materials on which he/she was laid? (Y/N) _____ Explain:_____

_____

SURROUNDINGS AT PLACE OF DEATH

Type of home (e.g., mobile home, single family dwelling, condo, apartment, other-describe: _____

_____

Condition: _____ Room temperature when infant found: _____

Was the house clean and orderly? (Y/N)_____ If no, explain: _____

_____

Heating system: Type:_____ Describe: _____

Cooling system: Type:_____ Describe: _____

Any evidence of tobacco/smoke?_____ Other odors? _____

Any evidence of alcohol or any other drugs in home? _____

Recent painting or fumigation? (Y/N)_____ Explain: _____

Other obvious health hazards? _____

_____

RECOMMENDATIONS FOR COLLECTION OF MATERIALS

What materials were collected?
- ❑ Bottle
- ❑ Formula in refrigerator
- ❑ Bedding
- ❑ Other _____

What photo or video documentation was taken? _____

INFANT'S HEALTH HISTORY

Place of birth - address: _____

Birth weight:_____ Length:_____ Birth Order:_____

Neonatal complications? _____

Use of home monitor? (Y/N)_____ In use at time of death? (Y/N)_____

Last meal: What did last meal consist of? _____

Amount:_____ When started:_____When finished:_____

Dietary habits: (Breast fed/Bottle fed? Formula? Frequency? Amount taken? How prepared? Who prepared it?):

_____

_____

Recent changes in feeding habits? (Y/N)_____ Explain: _____

Primary care physician's name _____
first middle last

Address: _____
City State Telephone

When was decedent last seen by a physician?_____ Describe circumstances: _____

_____

Development (e.g., appropriate milestones reached for age. Ask about doctor's opinion): _____

_____

Growth (general appearance, size, weight): _____

Medications (include home remedies and over-the-counter): _____

_____

List immunizations and dates: _____

_____

_____

Most recent illness (describe): _____

MOTHER'S HEALTH HISTORY

Any illness or medical complications during pregnancy? (Y/N)_____ If yes, describe: _____

_____

Previous significant illnesses? _____

_____

Dietary habits? _____

Family history of previous SIDS? (Y/N)_____ Explain: _____

Have you ever been hit or kicked or pushed down within the last two years? (Y/N)_____

Explain: _____

Risk factors? (e.g., smoking, drugs, alcohol use, other)_____

Use of prescription or other medications?_____

Any other past history of substance abuse? (Y/N)_____ If yes, describe: _____

_____

ALL PERSONS LIVING WITH DECEDENT

Full Name	Date of Birth	Relationship to Decedent	Soc. Sec. #	Employer

Marital/domestic status of those living in decedent's home. (e.g., married, single): _____

Approximate annual household income? _____

Language(s) spoken at home _____

Does the family have a social worker? (Y/N)_____ If yes, identify: _____

Violence in the home (describe)? _____

_____

Any previous referrals to social services? (Y/N)_____ If yes, specify: _____

_____

I hereby certify that after receiving notice of the death described herein, I took charge of the body and made inquiries regarding the cause of death in accordance with Chapter 331 of the General Statutes of Iowa-1983, and the information contained herein regarding such death is true and correct to the best of my knowledge and belief.

_____
(Signature of Medical Examiner)

_____
(Date Signed) (County of Appointment) (M.E. Number)

Further information about the Iowa Child Death Review Team may be obtained by writing or calling. The mailing address and telephone number are as follows:

Child Death Review Team
Lucas State Office Building - 3rd Floor
Des Moines, Iowa 50319-0075
Telephone - 515/281-3108
Fax - 515/242-6384
Email - spettit@idph.state.ia.us

Iowa Department of Public Health
Lucas State Office Building
321 East 12th Street
Des Moines, Iowa 50319-0075